

# Laucks

## Testing Laboratories, Inc.

940 South Harney St., Seattle, Washington 98108 (206)767-5060



## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works  
PO Box 3546  
Seattle, WA 98124  
ATTN: Jim Brown

LABORATORY NO: 2366

DATE: Feb. 24, 1987

PO# M1878

REPORT ON: WATER

### SAMPLE

IDENTIFICATION: Submitted 2/17/87 and identified as shown below:

Weekly Metro waste discharge ID# 3200

### TESTS PERFORMED AND RESULTS:

	<u>parts per million (mg/L)</u>
Zinc	0.11
Chromium	1.9
Copper	0.35
Nickel	0.79

Respectfully submitted,

Laucks Testing Laboratories, Inc.

*J. M. Owens*  
J.M. Owens

JMO:dr



This report is submitted for the exclusive use of the person, partnership, or corporation to whom it is addressed. Subsequent use of the name of this company or any member of its staff in connection with the advertising or sale of any product or process will be granted only on contract. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

AKC-0015636

# Laucks

## Testing Laboratories, Inc.

940 South Harney Street, Seattle, Washington 98108 (206) 767-5060

Chemistry, Microbiology, and Technical Services



## Invoice

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124  
ATTN: Jim Brown

INVOICE NO. 2502

DATE: March 7, 1987

PO# M1936

For the analysis of WATER: -----\$44.00

Net 30 Days

The sole liability of these laboratories for these services, including claims for negligence, strict liability in tort or warranty, shall not exceed the amount of this invoice. Samples may be discarded after analysis unless otherwise requested.



AKC-0015637

# Laucks

## Testing Laboratories, Inc.

940 South Harney Street, Seattle, Washington 98108 (206) 767-5060

Chemistry, Microbiology, and Technical Services

Alaskan Copper Works  
PO Box 3546  
Seattle, WA 98124  
ATTN: Jim Brown



## Invoice

INVOICE# 2793

DATE: March 24, 1987

PO# M 2059

For analysis of WASTE DISCHARGE ----- \$44.00

Net 30 Days

The sole liability of these laboratories for these services, including claims for negligence, strict liability in tort or warranty, shall not exceed the amount of this invoice. Samples may be discarded after analysis unless otherwise requested.



AKC-0015638

# Laucks

## Testing Laboratories, Inc.

940 South Harney Street, Seattle, Washington 98108 (206) 767-5060

Chemistry, Microbiology, and Technical Services



## Invoice

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124  
ATTN: Jim Brown

INVOICE NO. 2989

DATE: March 26, 1987

For the analysis of WASTE LIQUID: \_\_\_\_\_ \$177.00

Net 30 Days

The sole liability of these laboratories for these services, including claims for negligence, strict liability in tort or warranty, shall not exceed the amount of this invoice. Samples may be discarded after analysis unless otherwise requested.



AKC-0015639

# Laucks

## Testing Laboratories, Inc.

940 South Harney St., Seattle, Washington 98108 (206)767-5060



## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124

LABORATORY NO. 2800

DATE: April 2, 1987

PO# M2061

REPORT ON: ACID TANK SLUDGE

### SAMPLE

IDENTIFICATION: Submitted 03/10/87 and identified as shown below:

Acid Tank Sludge Sample ID# 3200-M2061

### TESTS PERFORMED AND RESULTS:

Total Solids -----58.2%

parts per million (mg/kg dry basis)

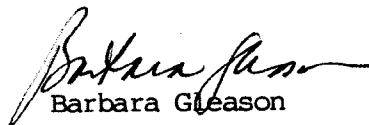
Aluminum -----	7400
Cadmium -----	L/0.5
Chromium -----	17000
Copper -----	980
Lead -----	53
Nickel -----	5500
Silver -----	L/0.5
Zinc -----	250

Key

L/ indicates "less than"

Respectfully submitted,

Laucks Testing Laboratories, Inc.

  
Barbara Gleason

BG:jm



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AKC-0015640

# Laucks

## Testing Laboratories, Inc.

940 South Harney St., Seattle, Washington 98108 (206)767-5060



## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124

LABORATORY NO. 3218

DATE: April 8, 1987

PO# M2261

REPORT ON: LIQUID

### SAMPLE

IDENTIFICATION: Submitted 03/31/87 and identified as shown below:

ID# 3200 - M2261

### TESTS PERFORMED AND RESULTS:

parts per million (mg/L)

Zinc	0.20
Chromium	1.3
Copper	0.36
Nickel	3.8

Respectfully submitted,

Laucks Testing Laboratories, Inc.

*J.M. Owens*  
J.M. Owens

JMO:jm

APR 10 1987



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AKC-0015641

# Laucks

## Testing Laboratories, Inc.

940 South Harney St., Seattle, Washington 98108 (206)767-5060



## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124

LABORATORY NO. 3070

DATE: April 8, 1987

PO# M2194

REPORT ON: WATER

### SAMPLE

IDENTIFICATION: Submitted 03/24/87 and identified as shown below:

#3200-M2194

### TESTS PERFORMED AND RESULTS:

parts per million (mg/L)

Chromium	0.24
Copper	0.089
Nickel	1.8
Zinc	0.045

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J.M. Owens

JMO:jim

APR 10 1987



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AKC-0015642

# Laucks

## Testing Laboratories, Inc.

940 South Harney St., Seattle, Washington 98108 (206)767-5060



## Certificate

Chemistry, Microbiology and Technical Services

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124

LABORATORY NO. 2934

DATE: April 8, 1987

PO# M2126

REPORT ON: WASTE DISCHARGE

### SAMPLE

IDENTIFICATION: Submitted 03/17/87 and identified as shown below:

ID# 3200

### TESTS PERFORMED AND RESULTS:

parts per million (mg/L)

Chromium	0.57
Copper	0.24
Nickel	0.36
Zinc	0.14

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J.M. Owens

JMO: jm

APR 10 1987



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AKC-0015643



# Laucks

## Testing Laboratories, Inc.

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## Certificate

Chemistry, Microbiology and Technical Services

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124

LABORATORY NO. 3260

DATE: April 15, 1987

PO# M-2273

REPORT ON: WASTE LIQUID

### SAMPLE

IDENTIFICATION: Submitted 04/02/87 and identified as shown below:

- 1) Nitric Acid Sample ID# 3600-M2273
- 2) Nitric Acid Sample ID# 3200-M2273

### TESTS PERFORMED AND RESULTS:

	1	2
Specific Gravity 25 degrees C	1.118	1.260
Total Acidity, calculated as % HN03 (methyl orange end point)	7.5	8.4

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J.M. Owens

JMO:jm



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AKC-0015644

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## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124  
ATTN. Jim Brown

LABORATORY NO. 3278

DATE: April 15, 1987

PO# M-2274

REPORT ON: WASTE DISCHARGE

### SAMPLE

IDENTIFICATION: Submitted 04/02/87 and identified as shown below:

ID# 3600-M2274

### TESTS PERFORMED AND RESULTS:

parts per million (mg/L)

Zinc -----	0.15
Chromium -----	0.20
Copper -----	0.050
Nickel -----	0.11

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J.M. Owens

JMO:jm



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AKC-0015645

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## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124  
ATTN: Gary Board

LABORATORY NO. 3498

DATE: April 22, 1987

PO# M 2383

REPORT ON: NITRIC ACID

SAMPLE IDENTIFICATION: Submitted 04/14/87 and identified as shown below:  
Nitric Acid Sample Test for Heavy Metals ID# 2002-M2383

TESTS PERFORMED  
AND RESULTS:

parts per million (mg/L)

Chromium	6000.
Copper	1700.
Nickel	9600.

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J. M. Owens

JMO:1aj



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AKC-0015646

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## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works  
P.O. Box 3546  
Seattle, WA 98124  
ATTN: Gary Board

LABORATORY NO. 3498

DATE: Apr 11 22, 1987

PO# M 2383

REPORT ON: NITRIC ACID

SAMPLE IDENTIFICATION: Submitted 04/14/87 and identified as shown below:

Nitric Acid Sample Test for Heavy Metals ID# 2002-M2383/3200

TESTS PERFORMED  
AND, RESULTS:

parts per million (mg/L)

Chromium	6000.
Copper	1700.
Nickel	9600.

Respectfully submitted,

Laucks Testing Laboratories, Inc.

J. M. Owens

JMO:1aj



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## Certificate

Chemistry, Microbiology, and Technical Services

CLIENT: Alaskan Copper Works  
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Seattle, WA 98124

LABORATORY NO. 3218

DATE: April 8, 1987

PO# M2261

REPORT ON: LIQUID

### SAMPLE

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J.M. Owens

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